

The Commonwealth of Massachusetts  
Executive Office of Health and Human Services  
Department of Public Health  
William A. Hinton State Laboratory Institute  
305 South Street, Jamaica Plain, MA 02130

DEVAL L. PATRICK  
GOVERNOR

TIMOTHY P. MURRAY  
LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD  
SECRETARY

JOHN AUERBACH  
COMMISSIONER

06/28/2011

Michael Sheehan  
Assistant District Attorney, Essex County

Dear ADA Sheehan,

Enclosed is the information you requested in regards to Commonwealth vs. [REDACTED] Included are copies of the following:

1. Curriculum Vitae for Annie Dookhan and Kate Corbett
2. Drug Analysis Laboratory Receipt.
3. Control Cards with analytical results for samples # [REDACTED]
4. Analysis sheets with custodial chemist's hand notations and test results.
5. GC/Mass Spectral analytical data for samples # [REDACTED]

Kate Corbett was the custodial chemist and performed the preliminary testing and net weight for this sample. Annie Dookhan was the confirmatory chemist and analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely,

A handwritten signature in black ink, appearing to read "Annie Dookhan".

Annie Dookhan  
Chemist II  
Drug Analysis Lab  
Jamaica Plain, MA. 02130  
(617) 983-6631

## Curriculum Vitae

Annie Khan (Dookhan)

### Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry.

University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

### Experience:

2003 – present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

\*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.

\*Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.

\*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.

\*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.

\*Maintenance and repairs of all analytical instruments.

\*Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.

\*Responsible for the Quality Control/Quality Assurance program for the drug lab.

\*Notary Public.

\*Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 – 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

\*Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.

\*Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.

\*Writing, revising and reviewing Standard Operating Procedures (SOPs).

\*Trained and supervised new chemists and interns for the department.

\*Routine QC testing of products for the FDA.

\*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.

\*Calibration, preventive maintenance, QC and QA of analytical instrumentation.

\*Complete testing of chemicals for Vendor Validation Project for the FDA.

\*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

### Additional Training:

Dept. of Justice – Forensics Professionals. (numerous trainings)

GLP/GMP course with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS courses with Agilent Technologies and Restek.

HPLC course with Waters Cooperation.

FTIR course with Spectros.

TOC training with MBL and Sievers.

### Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

## Curriculum Vitae

Kate A. Corbett

### Education

**Bachelor of Science Degree, CHEMISTRY May 2003**

**MERRIMACK COLLEGE**

Coursework included: Organic Chemistry, Inorganic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus

### Employment

**Chemist II State Laboratory Institute (March 2008-Present)**

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance and trafficking substances to determine violation of the Massachusetts drug laws
- Responsible for the identification of pharmaceuticals to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation, microscopes and balances for forensic drug analysis

**Chemist I State Laboratory Institute (2005-March 2008)**

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation for the purpose of performing forensic drug analysis
- Successfully completed an eight week training course in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- Appointed an assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 2005.

**Research Associate (September 2003 – August 2005)**

SENSOR TECHNOLOGIES, INC - Shrewsbury, MA

- Prepared chemistries used in making sensor beads
- Generated and examined sensors employing fluorescence spectroscopy
- Performed protein, dye and sugar assays using UV/VIS spectrophotometry
- Carried out titrations on ricin using fluorescence correlation spectroscopy
- Statistical analysis of experimental data

**Intern (March 2003 – August 2003)**

MASSACHUSETTS STATE POLICE CRIME LABORATORY - Sudbury, MA

- Assisted in the gathering of case files to fulfill the National Institute of Justice's No Suspect Backlog Reduction Grant
- Observed in the Evidence, Criminalistics, DNA, Drug, Trace, Toxicology, and Bomb/Arson Units

PLEASE PRINT CLEARLY OR TYPE ALL INFORMATION

*The Commonwealth of Massachusetts*

*Executive Office of Health and Human Services*

*Department of Public Health*

*State Laboratory Institute*

Boston Drug Laboratory

Tel (617) 983-6622

Fax (617) 983-6625

Amherst Drug Laboratory

Tel (413) 545-2601

Fax (413) 545-2608

Boston Hours

8:00 – 11:00

2:00 – 4:00


Amherst Hours

9:00 – 12:00

1:00 – 3:00

**DRUG RECEIPT**

City or Department: LYNN

Police Reference No.: 

Name and Rank of Submitting Officer: DET. MARK RICHMOND

Defendant(s) Name (last, first, initial):



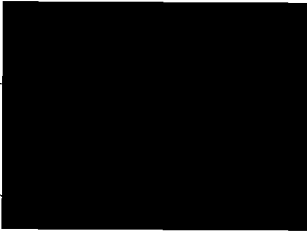
*To be completed by Submitter*


Description of Items Submitted

*To be completed by Lab Personnel*

Gross Weight

Lab Number

1 PB SUBSTANCE w/1 PB (COCAINE)	7.8g	
1 PB SUBSTANCE w/1 PB SUBSTANCE (COCAINE)	3.7g	

Received by: 

Date: 12-9-10

No. [REDACTED]  
City: Lynn Police Dept.  
Officer: Detective MARK RICHMOND  
Def: [REDACTED]

Date Analyzed: 12-16-10

Amount:  
No. Cont: 1 Cont: pb  
Date Rec'd: 12/09/2010  
Gross Wt.: 7.80

Subst: SUB

No. Analyzed:

Net Weight: 5.05g

# Tests: 7KAC

2ASD

Prelim:

Cocaine

Findings: cocaine

No. [REDACTED]  
City: Lynn Police Dept.  
Officer: Detective MARK RICHMOND  
Def: [REDACTED]

Date Analyzed: 12-16-10

Amount:  
No. Cont: 2 Cont: pb  
Date Rec'd: 12/09/2010  
Gross Wt.: 3.70

Subst: SUB

No. Analyzed:

Net Weight: 0.44g

# Tests: 7KAC

2ASD

Prelim:

Cocaine

Findings:

cocaine

# DRUG POWDER ANALYSIS FORM

SAMPLE #



AGENCY

Lynn

ANALYST

KAC

No. of samples tested:

1

Evidence Wt.

OK

## PHYSICAL DESCRIPTION:

1 pb containing an  
off white chunky  
substance  
double bagged

Gross Wt ( ):

6.2378g

Gross Wt ( ):

Pkg. Wt:

1.1798g

Net Wt:

5.0580g

## PRELIMINARY TESTS

### Spot Tests

Cobalt Thiocyanate  $(H^+)$  +  
Marquis -  
Froehde's -  
Mecke's -

### Microcrystalline Tests

Gold Chloride +  
TLTA  $(H^+)$  +

### OTHER TESTS

## PRELIMINARY TEST RESULTS

RESULTS

Cocaine

DATE

12/14/10

## GC/MS CONFIRMATORY TEST

RESULTS

Cocaine

MS OPERATOR

ASD

DATE

12/14/10

# DRUG POWDER ANALYSIS FORM

SAMPLE #



AGENCY

Lynn

ANALYST

KAC

No. of samples tested: 1

Evidence Wt.

AKZ

## PHYSICAL DESCRIPTION:

1 lg pb containing an  
off-white chunky sub +  
1 sm pb containing an  
off-white chunky sub

Gross Wt (2):

(Sm pb + direct wt of sub loose in lg pb)

Gross Wt ( ):

Pkg. Wt:

Direct

Net Wt:

(Sub. in lg pb)

## PRELIMINARY TESTS

### Spot Tests

Cobalt Thiocyanate  $H^+$  +  
Marquis -  
Froehde's -  
Mecke's -

### Microcrystalline Tests

Gold Chloride +  
TLTA  $H^+$  +

### OTHER TESTS

## PRELIMINARY TEST RESULTS

RESULTS

Cocaine

DATE

12/14/10

## GC/MS CONFIRMATORY TEST

RESULTS

Cocaine

MS OPERATOR

AST

DATE

12/16/10

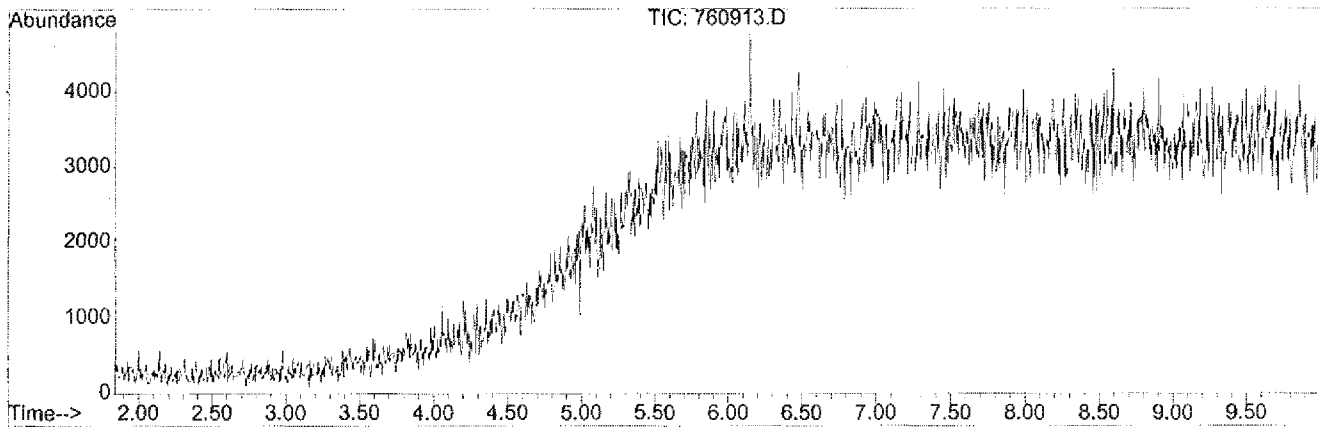
# Area Percent / Library Search Report

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## Information from Data File:

File Name : F:\Q4-2010\SYSTEM7\12\_15\_10\760913.D  
Operator : KAC  
Date Acquired : 15 Dec 2010 14:50  
Sample Name : BLANK  
Submitted by :  
Vial Number : 1  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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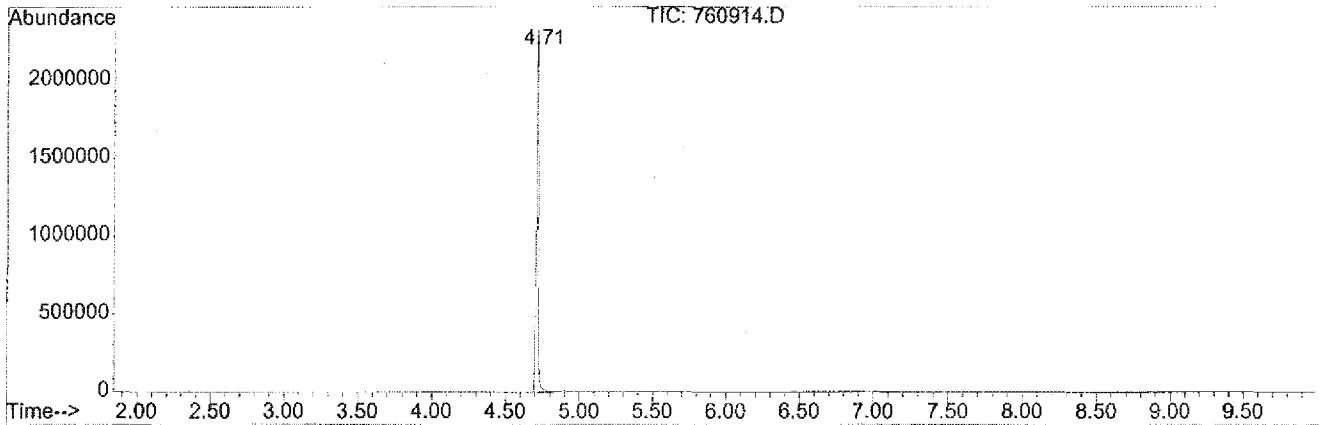
\*\*\*NO INTEGRATED PEAKS\*\*\*



# Area Percent / Library Search Report

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Operator : KAC  
Date Acquired : 15 Dec 2010 15:03  
Sample Name : COCAINE STD  
Submitted by :  
Vial Number : 14  
AcquisitionMeth: DRUGS  
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.712	2239275	100.00	100.00

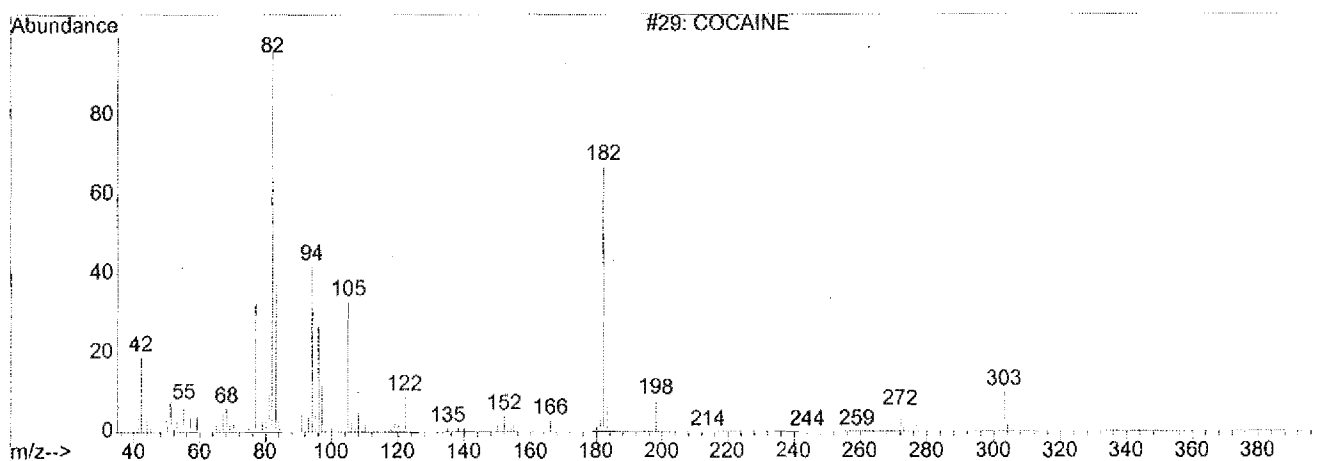
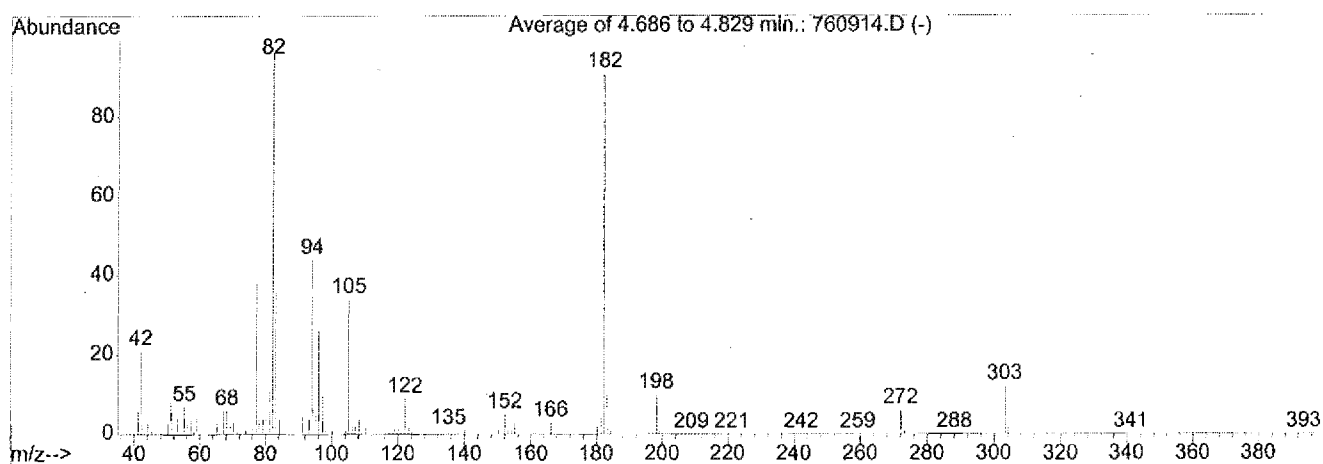
# Area Percent / Library Search Report

**Information from Data File:**

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 Operator : KAC  
 Date Acquired : 15 Dec 2010 15:03  
 Sample Name : COCAINE STD  
 Submitted by :  
 Vial Number : 14  
 AcquisitionMeth: DRUGS  
 Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90  
 C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90  
 C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	4.71	C:\DATABASE\SLI.L COCAINE	000050-36-2	99



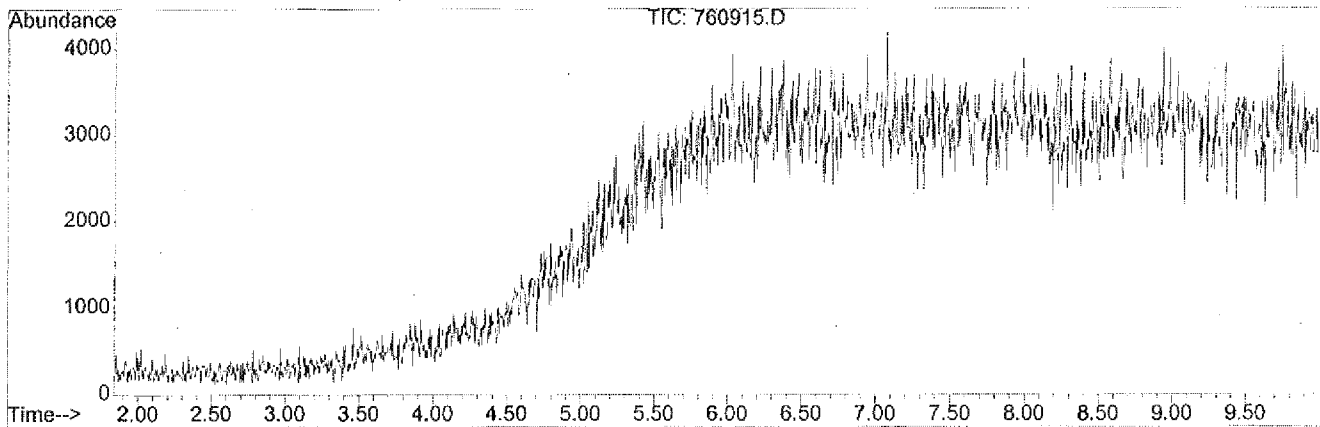
# Area Percent / Library Search Report

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## Information from Data File:

File Name : F:\Q4-2010\SYSTEM7\12\_15\_10\760915.D  
Operator : KAC  
Date Acquired : 15 Dec 2010 15:15  
Sample Name : BLANK  
Submitted by : DJR  
Vial Number : 1  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

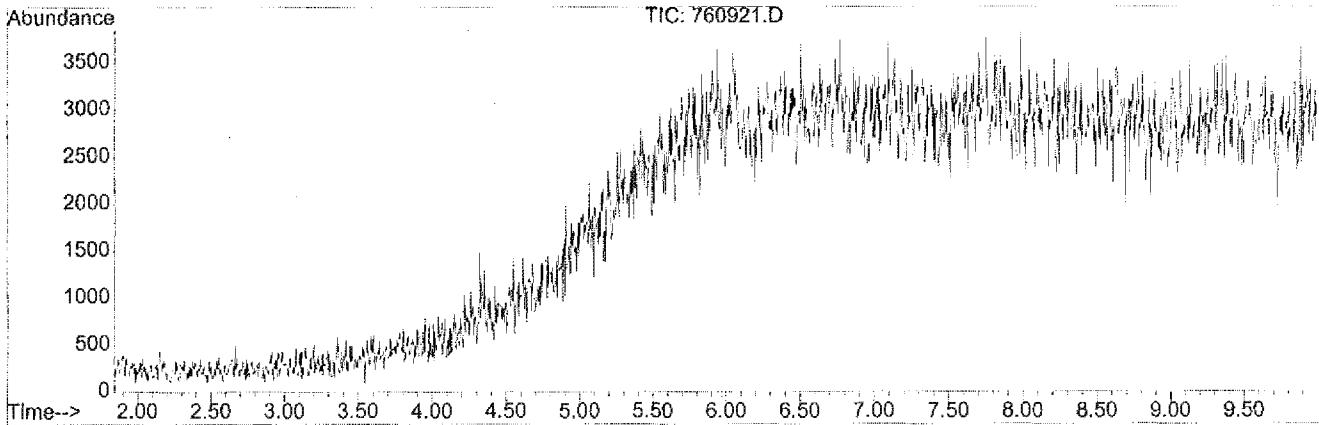
# Area Percent / Library Search Report

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File Name : F:\Q4-2010\SYSTEM7\12\_15\_10\760921.D  
Operator : KAC  
Date Acquired : 15 Dec 2010 16:31  
Sample Name : BLANK  
Submitted by : KAC  
Vial Number : 1  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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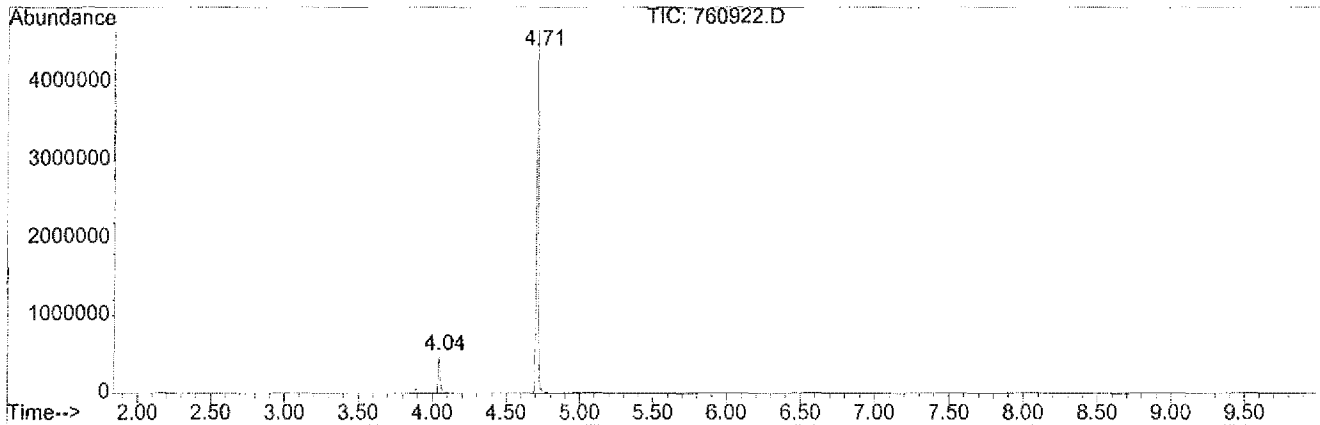
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\*\*\*NO INTEGRATED PEAKS\*\*\*

# Area Percent / Library Search Report

**Information from Data File:**

File Name : F:\Q4-2010\SYSTEM7\12\_15\_10\760922.D  
 Operator : KAC  
 Date Acquired : 15 Dec 2010 16:43  
 Sample Name : XXXXXXXXXX  
 Submitted by : KAC  
 Vial Number : 22  
 AcquisitionMeth: DRUGS  
 Integrator : RTE



Ret. Time	Area	Area %	Ratio %
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4.712	4361267	90.07	100.00

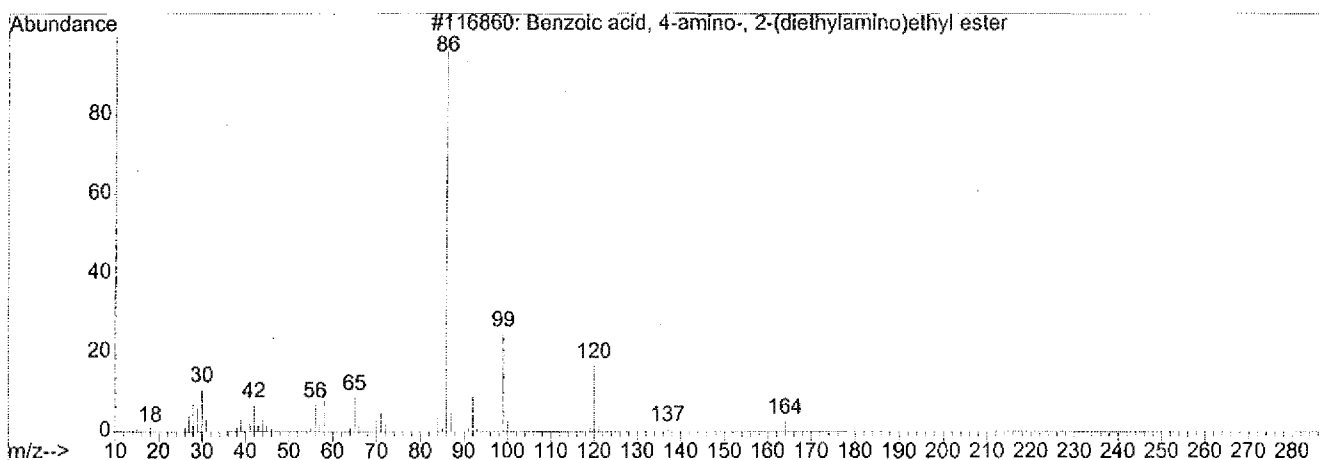
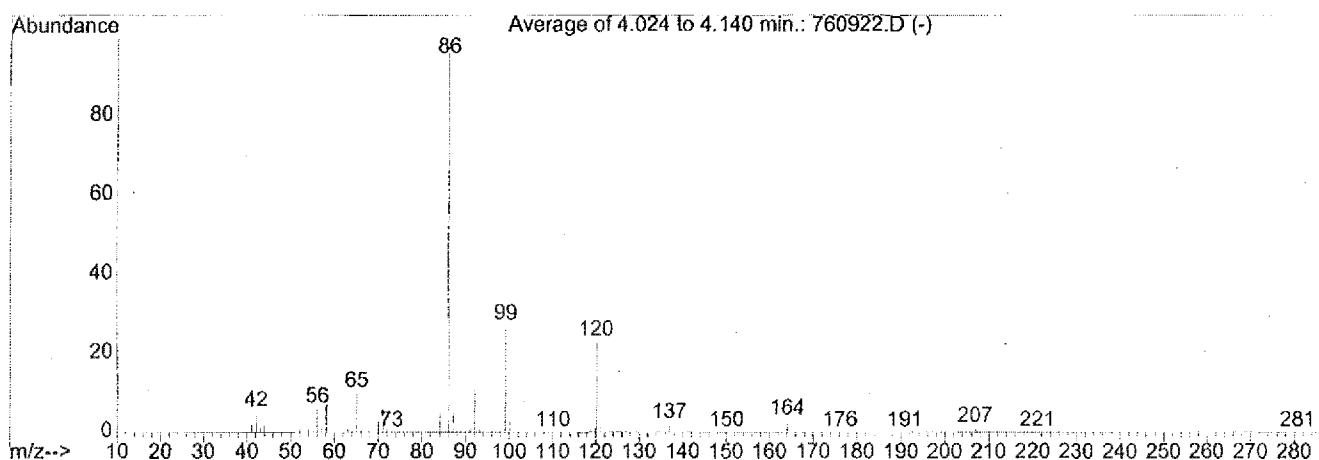
# Area Percent / Library Search Report

**Information from Data File:**

File Name : F:\Q4-2010\SYSTEM7\12\_15\_10\760922.D  
 Operator : KAC  
 Date Acquired : 15 Dec 2010 16:43  
 Sample Name : XXXXXXXXXX  
 Submitted by : KAC  
 Vial Number : 22  
 AcquisitionMeth: DRUGS  
 Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90  
 C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90  
 C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	4.04	C:\DATABASE\NIST98.L		
		Benzoic acid, 4-amino-, 2-(diethyla	000059-46-1	87
		Benzoic acid, 4-amino-, 2-(diethyla	000059-46-1	86
		Benzamide, 4-amino-N-[2-(diethylami	000051-06-9	86



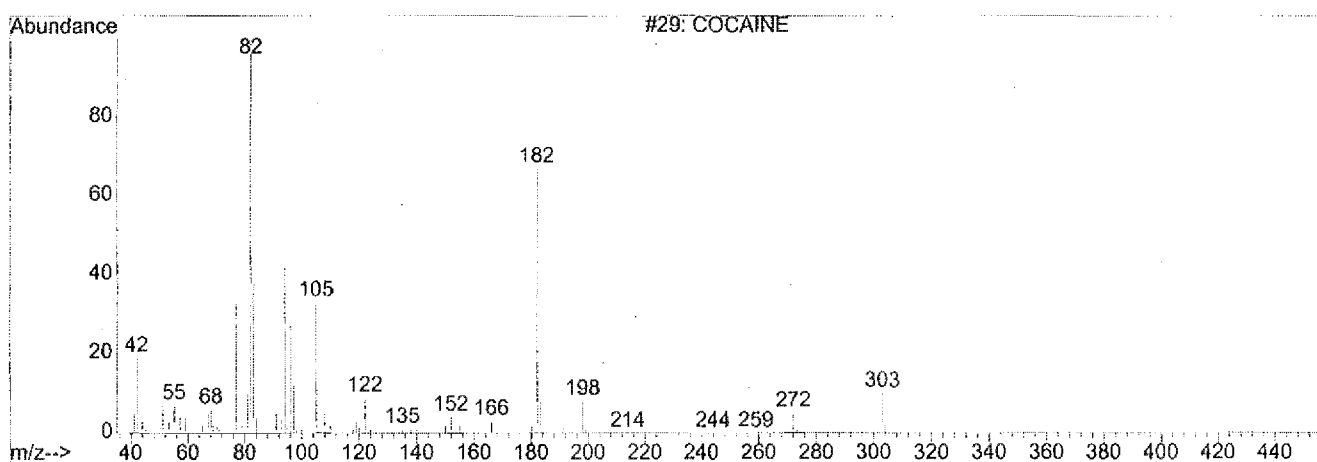
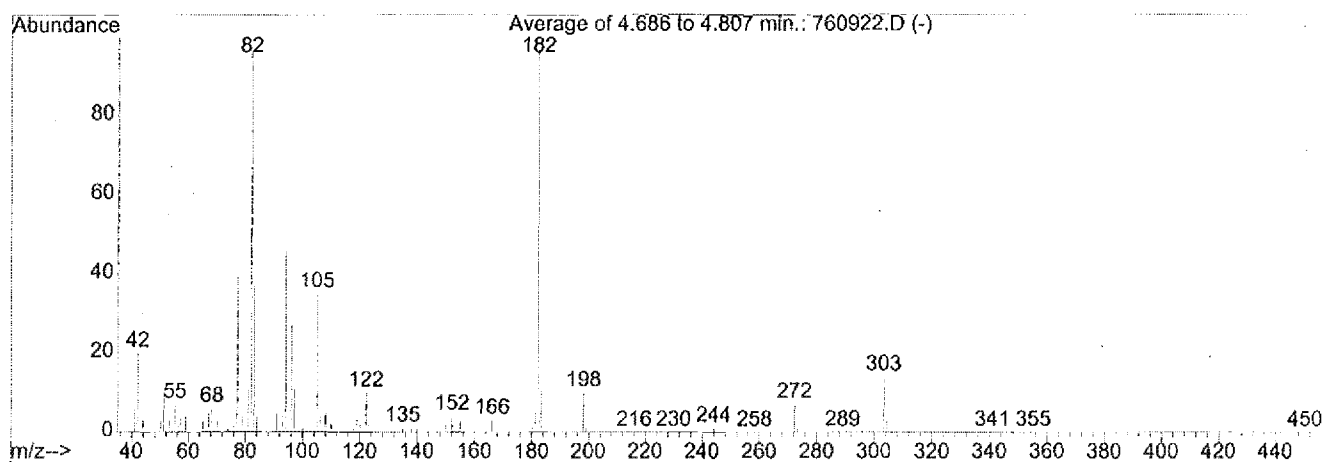
# Area Percent / Library Search Report

**Information from Data File:**

File Name : F:\Q4-2010\SYSTEM7\12\_15\_10\760922.D  
 Operator : KAC  
 Date Acquired : 15 Dec 2010 16:43  
 Sample Name : XXXXXXXXXX  
 Submitted by : KAC  
 Vial Number : 22  
 AcquisitionMeth: DRUGS  
 Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90  
 C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90  
 C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
2	4.71	C:\DATABASE\SLI.L COCAINE	000050-36-2	99



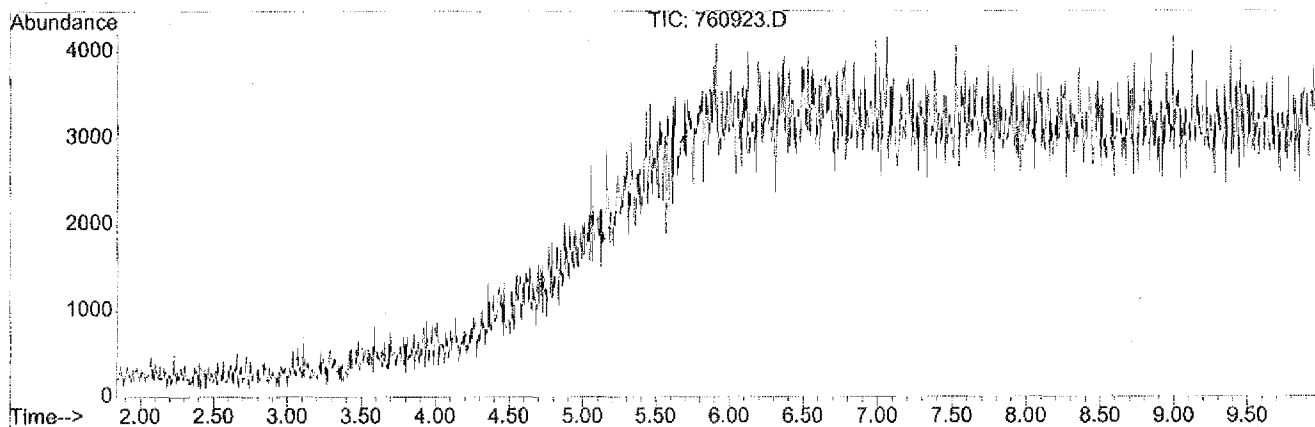
# Area Percent / Library Search Report

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Operator : KAC  
Date Acquired : 15 Dec 2010 16:56  
Sample Name : BLANK  
Submitted by : KAC  
Vial Number : 1  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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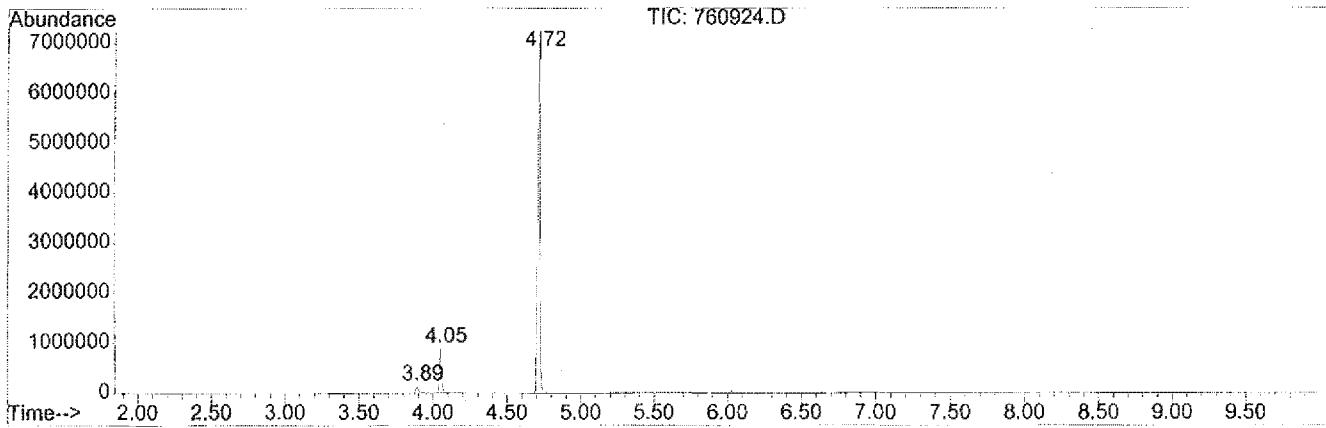
\*\*\*NO INTEGRATED PEAKS\*\*\*



# Area Percent / Library Search Report

## Information from Data File:

File Name : F:\Q4-2010\SYSTEM7\12\_15\_10\760924.D  
Operator : KAC  
Date Acquired : 15 Dec 2010 17:08  
Sample Name : XXXXXXXXXX  
Submitted by : KAC  
Vial Number : 24  
AcquisitionMeth: DRUGS  
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
3.892	187722	2.22	2.54
4.050	864898	10.24	11.70
4.718	7393547	87.54	100.00

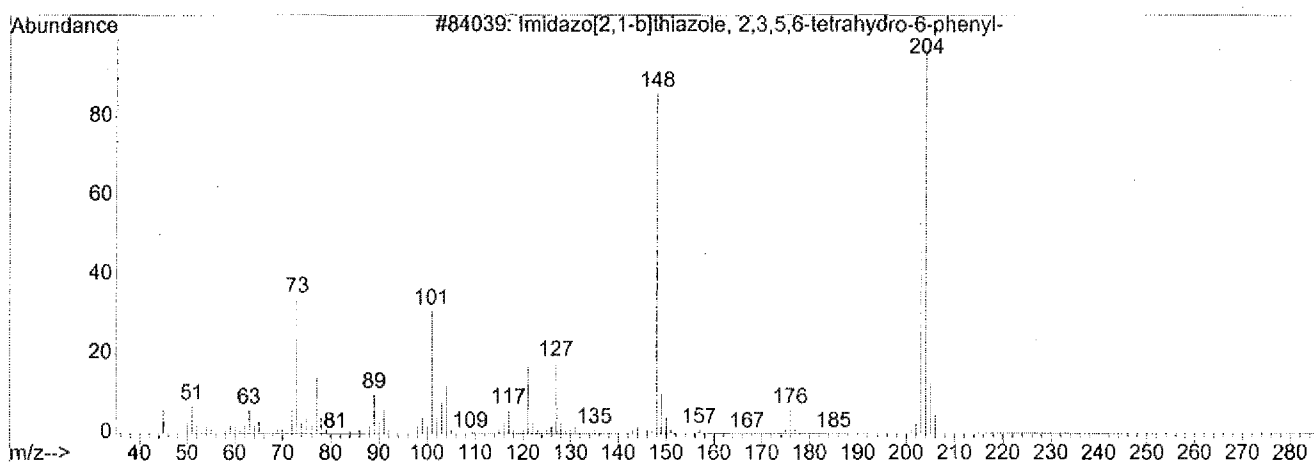
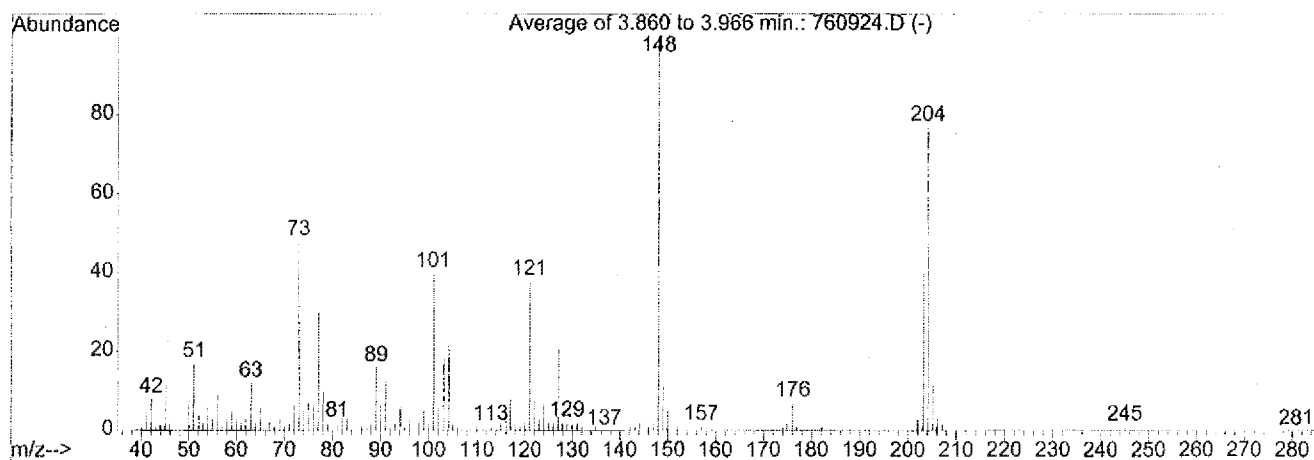
# Area Percent / Library Search Report

**Information from Data File:**

File Name : F:\Q4-2010\SYSTEM7\12\_15\_10\760924.D  
 Operator : KAC  
 Date Acquired : 15 Dec 2010 17:08  
 Sample Name : XXXXXXXXXX  
 Submitted by : KAC  
 Vial Number : 24  
 AcquisitionMeth: DRUGS  
 Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90  
 C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90  
 C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	3.89	C:\DATABASE\NIST98.L		
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	98
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	96
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	95



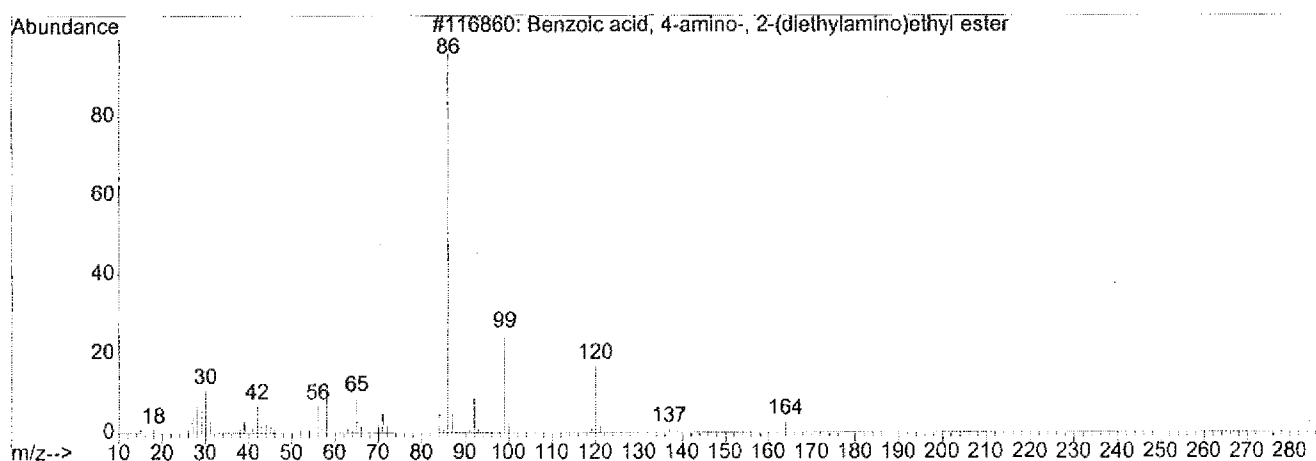
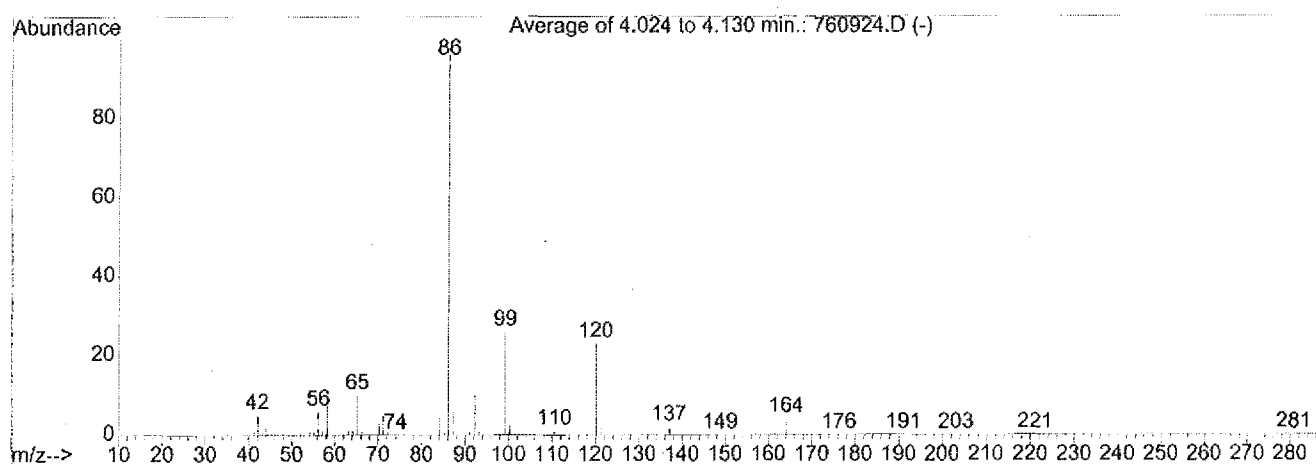
# Area Percent / Library Search Report

**Information from Data File:**

File Name : F:\Q4-2010\SYSTEM7\12\_15\_10\760924.D  
 Operator : KAC  
 Date Acquired : 15 Dec 2010 17:08  
 Sample Name : XXXXXXXXXX  
 Submitted by : KAC  
 Vial Number : 24  
 AcquisitionMeth: DRUGS  
 Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90  
 C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90  
 C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
2	4.05	C:\DATABASE\NIST98.L		
		Benzoic acid, 4-amino-, 2-(diethyla	000059-46-1	87
		Benzoic acid, 4-amino-, 2-(diethyla	000059-46-1	86
		Benzamide, 4-amino-N-[2-(diethylami	000051-06-9	78



# Area Percent / Library Search Report

**Information from Data File:**

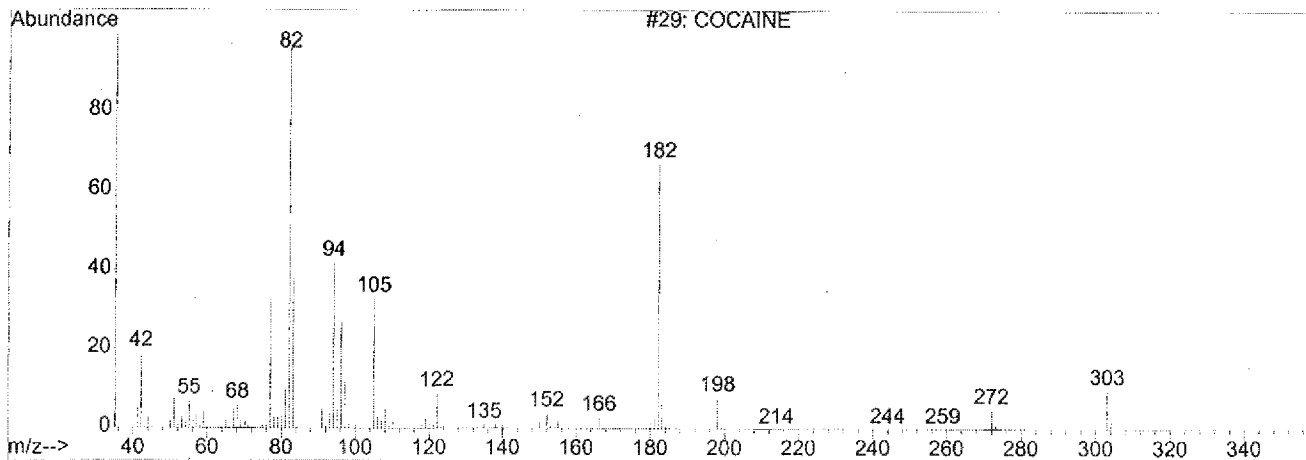
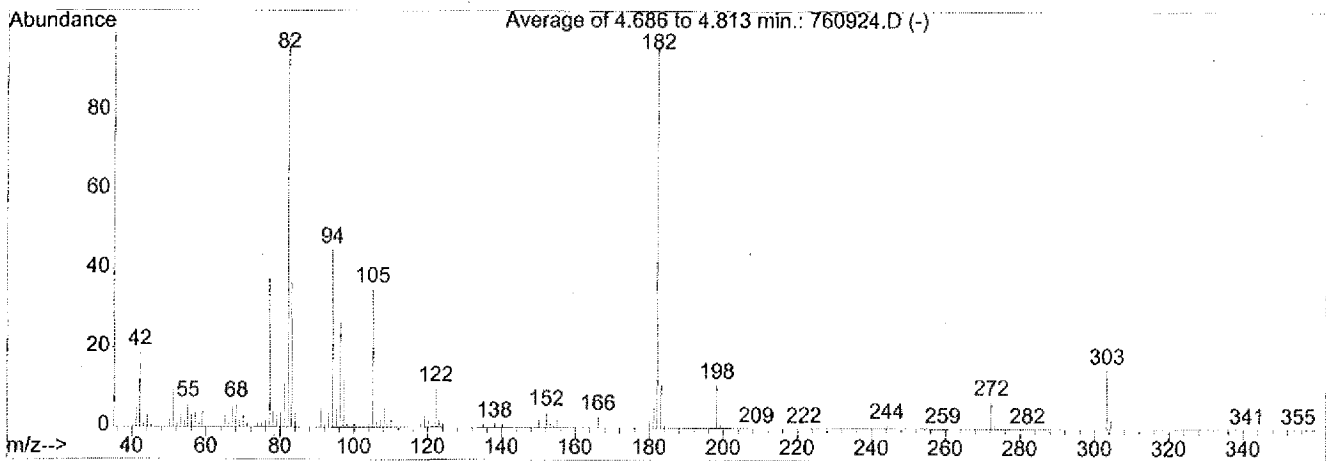
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File Name       : F:\Q4-2010\SYSTEM7\12_15_10\760924.D
Operator        : KAC
Date Acquired   : 15 Dec 2010   17:08
Sample Name     : 
Submitted by    : KAC
Vial Number     : 24
AcquisitionMeth : DRUGS
Integrator      : RTE
  
```

```

Search Libraries: C:\DATABASE\SLI.L           Minimum Quality: 90
                  C:\DATABASE\PMW_TOX2.L      Minimum Quality: 90
                  C:\DATABASE\NIST98.L
  
```

PK#	RT	Library/ID	CAS#	Qual
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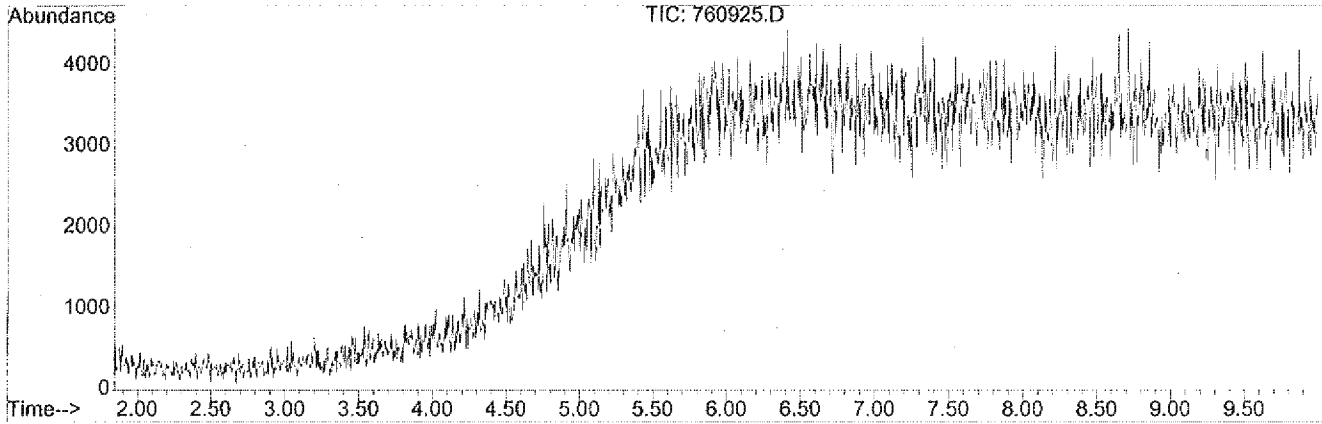
# Area Percent / Library Search Report

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## Information from Data File:

File Name : F:\Q4-2010\SYSTEM7\12\_15\_10\760925.D  
Operator : KAC  
Date Acquired : 15 Dec 2010 17:21  
Sample Name : BLANK  
Submitted by : ASD  
Vial Number : 1  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

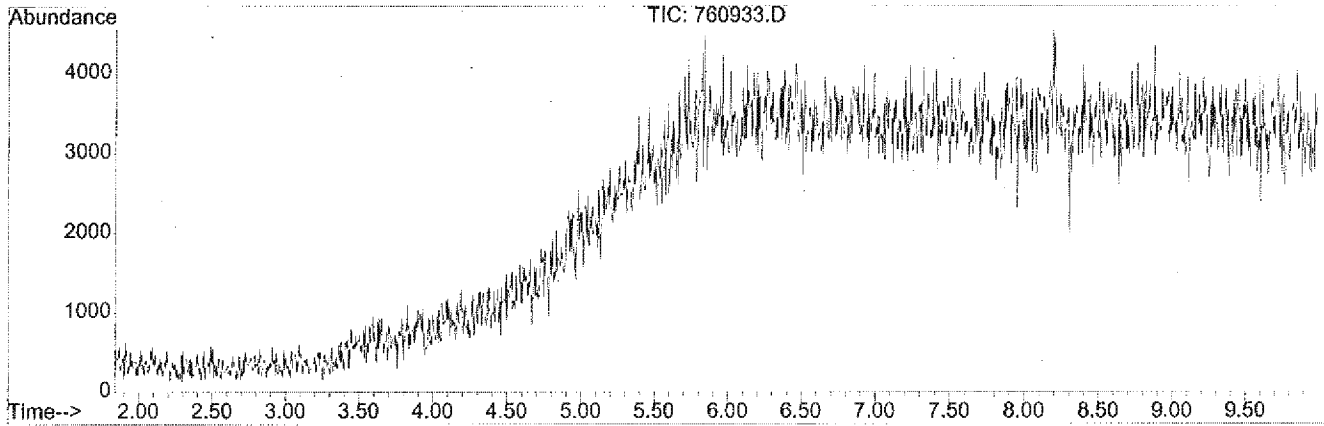
# Area Percent / Library Search Report

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## Information from Data File:

File Name : F:\Q4-2010\SYSTEM7\12\_15\_10\760933.D  
Operator : KAC  
Date Acquired : 15 Dec 2010 19:02  
Sample Name : BLANK  
Submitted by :  
Vial Number : 1  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

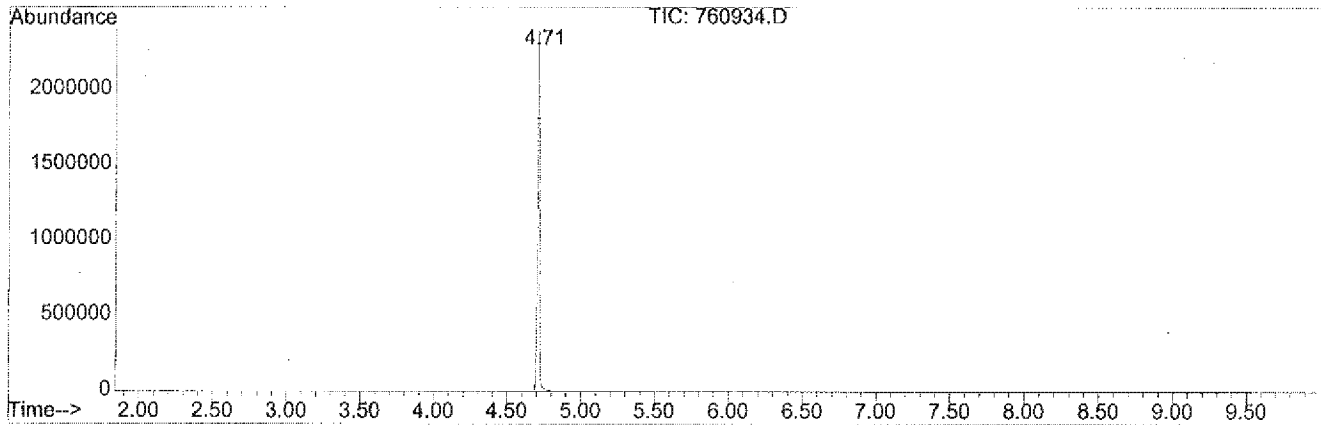
Area Percent / Library Search Report

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Information from Data File:

File Name : F:\Q4-2010\SYSTEM7\12\_15\_10\760934.D  
Operator : KAC  
Date Acquired : 15 Dec 2010 19:15  
Sample Name : COCAINE STD  
Submitted by :  
Vial Number : 34  
AcquisitionMeth: DRUGS  
Integrator : RTE

---



Ret. Time	Area	Area %	Ratio %
4.707	2212037	100.00	100.00

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# Area Percent / Library Search Report

**Information from Data File:**

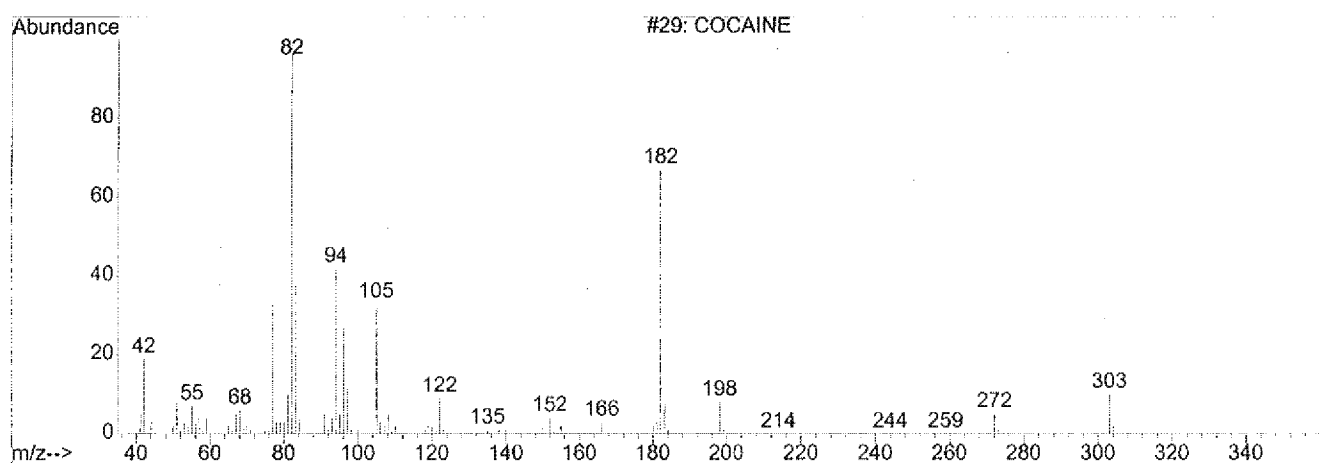
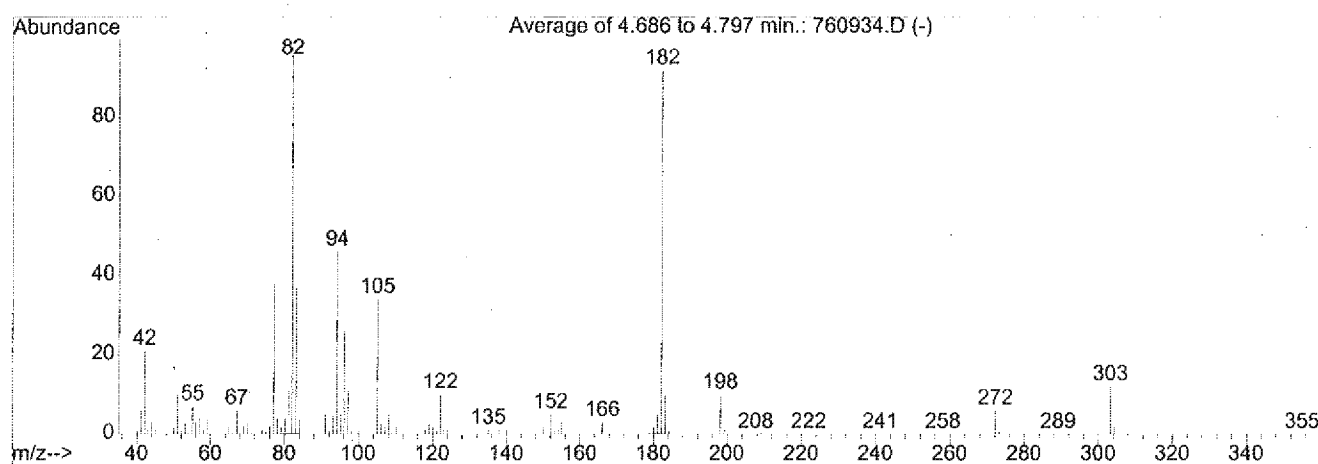
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File Name       : F:\Q4-2010\SYSTEM7\12_15_10\760934.D
Operator        : KAC
Date Acquired   : 15 Dec 2010  19:15
Sample Name     : COCAINE STD
Submitted by    :
Vial Number     : 34
AcquisitionMeth : DRUGS
Integrator      : RTE
  
```

```

Search Libraries: C:\DATABASE\SLI.L           Minimum Quality: 90
                  C:\DATABASE\PMW_TOX2.L      Minimum Quality: 90
                  C:\DATABASE\NIST98.L
  
```

PK#	RT	Library/ID	CAS#	Qual
1	4.71	C:\DATABASE\SLI.L COCAINE	000050-36-2	99

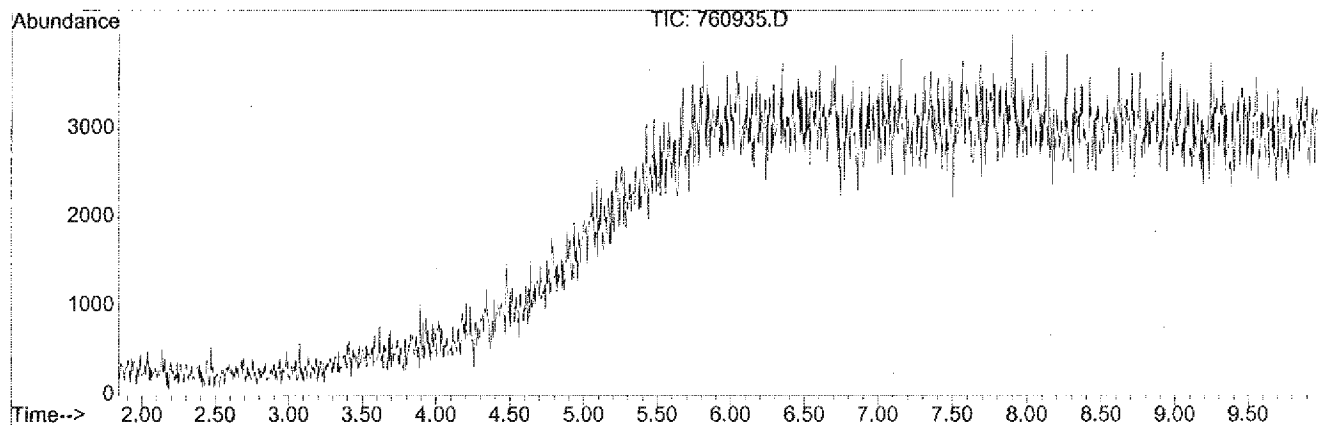




# Area Percent / Library Search Report

## Information from Data File:

File Name : F:\Q4-2010\SYSTEM7\12\_15\_10\760935.D  
Operator : KAC  
Date Acquired : 15 Dec 2010 19:27  
Sample Name : BLANK  
Submitted by : ASD  
Vial Number : 1  
AcquisitionMeth: DRUGS  
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*